CCS–C

Command and Control System—Consolidated (CCS–C)

Mission

Provide the state-of-the-art in satellite command and control systems for our Nation's military communications satellites by developing, deploying, and testing the Command and Control System—Consolidated (CCS–C). The CCS–C will provide 3rd and 4th Space Operations Squadrons (SOPS) of the 50th Space Wing with a modern, flexible, and operationally streamlined system to replace functionality currently provided by the 20-year-old Command and Control Segment (CCS).

Background

In 1997, Headquarters Air Force Space Command directed all DoD satellite programs under the mission umbrella of the 50th Space Wing, 14th Air Force to migrate off the CCS no later than October 2005. By FY06, CCS costs to support MILSATCOM systems will be approximately $40 million per year—an amount that is unacceptable to the Air Force. The MILSATCOM Joint Program Office (MJPO) created the CCS–C program to facilitate the control of the current MILSATCOM fleet and future MILSATCOM families and to reduce sustainment costs.

Description

The CCS–C will control over 30 military communications satellites across five families including: Milstar; Defense Satellite Communications System (DSCS); NATO III; Advanced Extremely High Frequency (AEHF); and Wideband Gapfiller Satellite (WGS) families using state-of-the-art commercial telemetry, tracking, and control (TT&C) technology.

Modern, commercially available computer servers and workstations running commercially available TT&C software packages on a local area network based client/server architecture will contribute to increased availability and reliability over the legacy system's outdated mainframe architecture and custom-designed software. The CCS–C will reduce the cost of sustainment by at least 50 percent and provide the warfighter with increased capability over today's system. Features like automation of routine tasks, with the capability to automate more complicated satellite operations tasks, contribute to increased warfighter efficiency in controlling our Nation's most critical communications assets.

The CCS–C is being acquired in a two-phase process. The first phase, called the Demonstration Phase, was

a one year effort beginning in February 2001. The contractors competed in a "fly-off," in which each designed and built their own prototype of the final system and demonstrated it by controlling a nonoperational satellite in space, which served as the test bed for the contractors' systems. Space operators from the 3rd and 4th SOPS performed the demonstration using each contractor's prototyped system. In March 2002, following a downselect source selection, the Development/Sustainment Phase contract option was awarded to Integral Systems, Inc. (ISI) of Lanham, MD.

During the Development/Sustainment Phase, ISI will transition the legacy Milstar, DSCS, and NATO satellites from CCS by September 2004. At the same time, the CCS–C will be ready to support the new WGS and AEHF satellites, which will begin launching in mid-2004 and 2006 respectively, as well other advanced satellite programs.

MILSATCOM Joint Program Office
SMC/MC
2420 Vela Way
Suite 1467, A–8
El Segundo, CA 90245
310.336.4877 or 310.336.4890
http://www.losangeles.af.mil/smc/mc